

# NORTH SHORE AMATEUR RADIO CLUB "SPARKS"

## CLUB CALL VE3NSR

CLUB REPEATERS, VE3OSH 147.120 & VE3NAA 443.000

N.S.A.R.C. EXECUTIVE FOR 1993 *MARCH*

President	Richard Button	VE3RJB	725-7150
Vice President	Casey Coley	VE3NGT	623-0264
Treasurer	Laird Solomon	VE3LKS	434-7339
Secretary	Fred Bengel	VE3TIG	576-4839
Program Director	Peter Johns	VE3WWZ	723-9049

## March 1993 Issue

## CLUB COORDINATORS

A.R.E.S. Coordinator	Margaret Jeffery	VE3BNN	725-1238
Special Events Coordinator	Ralph Day	VE3CRK	576-8738
Bulletin Editor	Victor Doty	VE3LNX	983-5831
Bulletin Publisher	Glen Goslin	VE3LIZ	725-1545
Club Historian	Mike Sherba	VE3DKW	723-7674
2 Meter Net Control	Roy Miller	VE3AAF	852-5447
Registrar	Keith Wyard-Scott	VE3GDF	723-5758
Get Well Cards	Colin Bell	VE3CEU	723-7842
Nonquon Canoe Races	Glen Goslin	VE3LIZ	725-1545
Field Day	Tom Rogers	VE3BTR	640-5549
Instruction Coordinator	Rick Gibson	VE3ASH	434-2886
Auditor	Rick Gibson	VE3ASH	434-2886
Lists and Labels	Paul Dale	VE3LHZ	434-6741
Jamboree On The Air	Tom Rogers	VE3BTR	640-5549
Club Inventory	Len Nixon	VE3SVD	985-7120
Ride For The Handicapped	Ray Zambonelli	VE3OUB	723-2467
	Ralph Day	VE3CRK	576-8738

Meetings commence at 19:30 sharp and meeting are ALWAYS on 2nd Monday of the month.

North Shore Amateur  
Radio Club Inc.  
P.O. Box 171, Oshawa  
Ontario L1H 7L1



The 2 meter net convenes Thu.  
night at 7:30 on VE3OSH the club  
rprr., code practice 8:30 to 9:30  
provided by Bernie VE3ATL,  
Meetings Held At Arts and  
Resources Centre in Oshawa  
On Queen Street

### Trivia Answer

On the Byrd Expedition to the Antarctic several of the Famous "SuperPro" receivers were used to communicate with the outside world. (Editor)

## PLEASE RETURN

Several months ago a video tape of field day and club activities was loaded to someone in the NSARC by Mike VE3DKW, unfortunately this is the only copy he has so he would appreciate hearing from the person who borrowed the tape as Mike can't remember who he loaned it to. (Editor)

Did you hear about the day the computer at the office broke down and everybody had to think?

(VE3SVD)

### A Continuation Of "Some of WWV's Secrets" The A and K Indices

The A and K indices are measures of how active the Earth's geomagnetic field is. The A index is a number between 0 and 400, and the number given by WWV is based on measurements made over the last proceeding 24 hour period. The K index is similar, but the number given by WWV is updated every three hours. The K index is generally expressed as a number less than 10.

An A index value of 10 or less indicates that the geomagnetic field is quiet, without ionosphere storms or other disturbances that can disrupt short-wave propagation. As the A index value rises, so does signal absorption in the ionosphere, especially on high latitude paths (such as from New York to London or Seattle to Tokyo). As the A index approaches 100, high latitude paths are severely disrupted and a visible aurora is often seen in northern areas. These are known as auroral conditions

among DX'ers. Auroral conditions are most noticeable on lower frequencies, usually below 10 MHz.

The K index uses a different measurement scale. A value of 0 indicates the geomagnetic field is normal. A value of 1 or 2 means the geomagnetic field, and reception conditions are unsettled. K index of 3 or higher indicates conditions will be auroral. The K index value broadcast by WWV is measured at Boulder Colorado, and will not be the same across North America. If you are located north of Colorado (as in Seattle or Toronto) the K index will be higher; if you're located to the south, as in Atlanta or Los Angeles, the values will be lower.

Let's suppose you're listening to 49 meters during the evening hours in North America. At that time during normal reception conditions, there will be numerous powerful signals from Europe on 49 meters. However if the A index is high (say over 100), then those high latitude signals from Europe will be absorbed in the ionosphere instead of propagated to your listening post. This doesn't mean 49 meters will be empty of signals. When conditions are auroral, the area of greatest ionospheric disturbance is around the poles. The amount of disturbance decreases towards the equator, meaning that signals from Central and South America can be received in North America during auroral conditions on frequencies where European signals are normally dominant.

### Solar Activity and Geomagnetic Field Conditions

There are two other measures of solar activity given by WWV and WWVH. Solar activity describes the general level of solar activity, and WWV/WWVH uses the terms "low" "very low," "moderate" "high" or "very high" to describe it. The geomagnetic field is described as being "quiet" "unsettled" or "active".

The last part of the WWV/WWVH propagation bulletin is a forecast of expected solar activity and geomagnetic field conditions for the next 24 hours.

### Putting It All Together

So how to interpret all this data from WWV/WWVH? It is quite simple once you understand some what some of the terms and values mean. If the solar flux reading is high or rising, while the A (or K) is low and the geomagnetic field is quiet, DX'ing will be good. This is especially so if the A or K index has been low for several consecutive days. If the A or K index is at a moderate level and the geomagnetic field is mildly unsettled, then DX conditions will be mediocre. If the A or K index is high and the geomagnetic field is active, then you'll be stuck with auroral conditions or other crummy propagation.

If you keep a log book, (which few people do these days unfortunately) record the data broadcast by WWV for several days running and you will soon see patterns developing in propagation data that is broadcast from WWV and the DX from different locations. You will see after several consecutive days of A or K readings at a certain level or a particular value of solar flux will indicate which type of DX will be possible from different parts of the world.

The WWV/WWVH propagation bulletins are also a great way to save time. If I hear the A and K indices are high, the solar flux is low and the geomagnetic field is unsettled, then I forget any serious DX'ing for the evening and proceed with some other activity (such as turning on the computer hi hi) . (Editor / taken from Popular Communications by AA6FW)

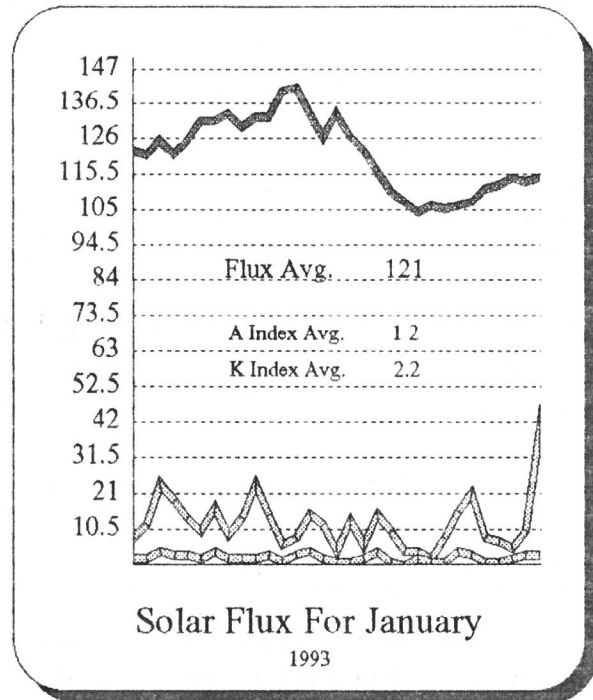
### You're Getting Old When

You think you've been complimented when you're called "square" OR

The gleam in your eyes is the sun reflecting off your bifocals. (VE3LLZ)

### House Hold Hint

To clean telephones and clock radios use cotton swabs dipped in rubbing alcohol. (Editor)



### Minutes

The meeting started at 7:45 with Richard (RJB) presiding.

#### NEW BUSINESS.

FLEA MARKET, Len (SVD) security, Mike (DKW) parking, George (INB) tables and Peter (PLM) will be looking for volunteers for the flea market on the setup night and on the day of the flea market.

FIELD DAY is on the 26/27 of June 1993, at the Harmony Valley Conservation Area at the east end of Oshawa.

EMO, Margaret (BNN) told the group that the Pickering Club also decided to keep the EMO under a separate banner from the radio clubs. An EMO practice will be tentatively held at the end of September, 1993. Volunteers were requested to give a demonstration of Amateur Radio at the Military Regiment at the Oshawa Airport on the same weekend as field day. Margaret (BNN) will also investigate the

possibility of changing the meeting place at the 420 wing hanger.

**Stan Phillips** from **Durham College** addressed the club about re-establishing the amateur station at the college and also teach the theory necessary for an amateur ticket. **MOTION**, by **Jim (SVM)**, that the club assist the college in setting up the station. Seconded by **Rick (ASH)**. **Jim Tower Jr. (UQZ)** will be liaison between the club and the college.

**VE3AAF**, The club welcomed **Roy (AAF)** back from his serious illness and the gang was glad to see him.

**GOTA**, will be held on the weekend of **Saturday Feb 20, 1993**. **Tom (BTR)**, requested recruits to help out. Four volunteers will assist in setting up the stations.

**AUDITOR**, **Rich (ASH)** will audit the books for 1992.

**MOTION**, by **Ralph (CRK)**, that signs be made of a suitable material for advertising club activities. Seconded by **Jim (SVM)**. **George (UEH)**, will get prices for the lettering of the signs.

**TRAILER**, **Jim (SVM)**, explained the design for the club trailer. **MOTION** by **Len (SVD)**, that the trailer be constructed with the cost not to exceed \$2,000. Seconded by **Roy (AAF)**.

**FINANCIAL REPORT** by **Laird (LKS)**, **Laird** reported that the club has a healthy balance as of February 8, 1993.

The guest speaker **Ron, (ORP)**, missed the meeting due to the flu.

Meeting closed at 10:00 PM. (VE3WWZ)

### Trivia For March

In an electrical storm which would be the most effective, a lighting rod with a sharp point or a blunt one? (Editor)

### Another Hint

Piano keys can be cleaned with tooth paste. Apply paste to a well dampened cloth. Rub keys well wipe dry and buff with a soft dry cloth. (Editor)

## New Auditor

As most of you know **Harry VE3QG** has retired from his position of official auditor for the N.S.A.R.C. after many years of faithful service. **Harry** has the same bug as **Rae VE3RP** who is involved in tracking down and cataloguing all the information on his relatives and as **Rae** will testify is a very very time consuming operation, so we wish **Harry** all the best in his new endeavour.

Now to the point in question, we have a new club auditor **VE3ASH Rick Gibson** who will taking over from **Harry**, we wish **Rick** the best in his new position, I also understand that **Rick** will be resigning from his instruction co-ordinator position at the end of the existing course this spring. (Editor)

## Program For March

The program for the March meeting will be presented by **Norham Radio Inc.**, **Angelo VE3AMR** will be demonstrating some of the newest equipment on the market and will be able to answer nearly any question that you may have, so if you are interested in seeing some of the newest gear on the market make it a point to make the next meeting on **March 8th, 1993 at 7:30 local time**. (Editor)

## Instruction Co-ordinator

The NSARC is looking for a new instructor for the **Amateur Radio** class that will be commencing this fall, anyone interested in this position should contact **VE3ASH Rick Gibson at 434-2886**. **Rick** is resigning from this position after several years of teaching the radio classes. (Editor)

## Fleamarket

Lets not forget the big event coming up on **April 3 1993**, we will require all the bodies that are available for set up (**FRI. NIGHT**) and take down (**SAT AFTERNOON**) so lets all help a little.

(Editor)



**Wanted** Article from CQ mag. July 1971 and Feb. 1978 or copy of article  
call Mike VE3DKW 416-723-7674

**Wanted** Old frequency meters, the older the better.  
call Mike VE3DKW 416-723-7674

**Wanted** Looking for old tubes, especially some 45's or 245's  
call Mike VE3DKW 416-723-7674

**For Sale** Yaesu FT-101 ZD transceiver manual, hand mic \$500.00  
call Bill N4LEC 705-876-1820

**For Sale** Kenwood R-1000 general coverage receiver, manual \$400.00  
call John VE3??? 416-728-3711

**For Sale** Assorted GRS gear, for more info and price contact Paul  
call Paul VE3LHZ 416-434-6741

**For Sale** 6146 tubes A's, B's, & W's all checked, A's, B's \$30 pair, W's \$40 pair  
call Vic VE3LNX 416-983-5831

**For Sale** Icom IC-402 70cm ssb/cw transceiver 3 watts, manual \$200.00  
call Vic VE3LNX 416-983-5831

**For Sale** FT-470 dual band HT, PA6, 2 dry cell packs, spk mic, leather case \$400.00  
call Gord VE3UIB 416-433-7005

**For Sale** Bird 43 series watt meter (N) type connectors \$170.00  
call Vic VE3LNX 416-983-5831

**For Sale** Delhi 64' tower, on ground, needs paint, asking \$250.00  
call Walter VE3FJC 416-263-2338

**For Sale** HP 7475A 6 pen colour plotter as new with manual, asking \$475.00  
call Vic VE3LNX 416-983-5831

**For Sale** Transco 28 vdc relays with C type connectors asking \$35.00  
call Vic VE3LNX 416-983-5831

**For Sale** Micro wave Modules 6 meter transverter 10 watts, asking \$300.00  
call Vic VE3LNX 416-983-5831

**For Sale** MFJ remote active antenna model MFJ-1024, asking \$40.00  
call Vic VE3LNX 416-983-5831

**For Sale** Heath SA-2500 auto tuner, 2 KW rated, like new asking \$375.00  
call Clare VE3CXX 416-433-8937

**For Sale** Heath SB 610 monitor scope with manual, asking \$125.00  
call Clare VE3CXX 416-433-8937

**For Sale** Isapole ant for 220 MHz, with mast pipe like new asking \$60.00  
call Vic VE3LNX 416-983-5831

**For Sale** Heath VLF converter model HD 1420 with manual, asking \$45.00  
call Vic VE3LNX 416-983-5831

**For Sale** 6, 3/8" guy wires for Delhi 64' tower, with 6 insulators, 6 HD 1/2" turn buckles and one 5' anchor, asking \$150.00  
call Johann VE3THI 416-655-4480

ANNOUNCING . . . . .

THE BIGGEST AMATEUR RADIO FLEA MARKET IN  
CANADA. THE 12TH ANNUAL

**DURHAM REGION  
AMATEUR RADIO  
AND COMPUTER  
FLEA MARKET**

Organized by: South Pickering A.R.C., VE3SPC  
North Shore A.R.C., VE3NSR

Date: Saturday April 3, 1993

9:00 a.m. to 2:00 pm

Location: Pickering High School,  
Church Street, Pickering Village, Ajax  
Admission: \$5.00 (Includes Superprize Ticket!)

**VENDORS**

Doors open 7:30 a.m. (Vendors Only)  
Tables \$12.00 (per 6 Ft) + Admission  
Reservations are payable to:  
South Pickering Amateur Radio Club  
P.O. Box #53  
Pickering Ontario  
L1V 2R2

**INFORMATION AVAILABLE FROM:**

Kim Becker VE3SVZ  
(416) 571-6883

**TABLE RESERVATIONS:**

Ron Brown VE3WZ  
(416) 839-3711

**TALK IN FREQUENCY**

VE3SPA Input 147.975 Output 147.375  
VE3OSH Input 147.720 Output 147.120

Super Prize \$500 Cash

Door Prizes!

Commercial Displays!

Refreshments Available

